
 Indiana Department of Environmental Management
Protecting Hoosiers and Our Environment Since 1986
Office of Compliance Support 

Indiana Department of Environmental Management



Stacey Pfeffer

 Indiana Department of Environmental Management
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IDEM's Four Major Programs




- Office of Air Quality (OAQ)
- Office of Water Quality (OWQ)
- Office of Land Quality (OLQ)
- Office of Compliance Support (OCS)

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IDEM Mandates

- Air, water, solid waste, hazardous waste permitting.
- Conduct compliance evaluations of all regulated entities.
- Collect air quality, water quality, contaminated site environmental data and report to the public and the U.S. Environmental Protection Agency (U.S. EPA).
- Guide or oversee cleanup of contaminated properties.

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IDEM Mandates

- Prepare and implement plans to meet clean air and clean water quality standards.
- Work with the environmental board on rulemaking.
- Pursue enforcement actions.
- Provide technical assistance to regulated entities.





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IDEM Mission Statement


“IDEM's mission is to implement federal and state regulations to protect human health and the environment while allowing the environmentally sound operations of industrial, agricultural, commercial and government activities vital to a prosperous economy.”





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Do I Need an Air Permit?

- Determine the number and type of emission units.
- Determine the Potential to Emit (PTE).
- Summarize total PTE for criteria and hazardous air pollutants.

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Emission Units



Spray Booth Equipment



Plating Baths



Oil Refinery –
Distillation Columns



Welding



Woodworking Equipment



Combustion Units




Printing Press

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Potential to Emit

- PTE calculates the emissions from an unit, as if it were operating 24 hours per day, 365 days per year at maximum capacity.
- Provides maximum flexibility in operation.
- You should also evaluate actual emissions to determine if you could operate with limitations on PTE.




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Air Pollutants/Permits

Pollutant	Registration	MSOP	Title V
VOC	≥ 5/10 (*CE) T/Y	≥ 25 T/Y	≥ 100 T/Y
NO _x	≥ 10 T/Y	≥ 25 T/Y	≥ 100 T/Y
CO	≥ 25 T/Y	≥ 100 T/Y	≥ 100 T/Y
SO ₂	≥ 10 T/Y	≥ 25 T/Y	≥ 100 T/Y
PM/PM-10	≥ 5 T/Y	≥ 25 T/Y	≥ 100 T/Y
Lead	≥ 0.2 T/Y	≥ 5 T/Y	≥ 10 T/Y
Single HAP	< 10 T/Y	<10 T/Y	≥ 10 T/Y
Total HAP	< 25 T/Y	<25 T/Y	≥ 25 T/Y
GHG	-	-	≥ 100,000 T/Y




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Alternative Air Permits

- Federally Enforceable State Operating Permits
 - For sources who have the potential to exceed Title V emission level, but accept federally enforceable limits on PTE to remain minor.
- Source Specific Operating Agreements
 - Specific list of operations that may qualify for SSOAs.
 - One source may elect to have up to four SSOAs.
- Permit-by-Rule
 - Typically requires a construction/operation permit first.
 - A few specific industries can apply for this as first permit.




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Application Time Clock

- When can I construct?
 - Not until the construction approval has been issued.
- 326 IAC 1-2-21 "Construction" defined
 - Means fabrication, erection, or installation of an emission unit.
 - Does not include: installation of building support, erection of storage structure, dismantling of equipment and control devices, etc.
- 326 IAC 2-2-1 "Construction" defined
 - Any physical change or change in the method of operation.




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Opportunities to Review

- The permit reviewer will share the draft permit with the applicant before Public Notice.
- The applicant can also make formal comments during Public Notice.
- The applicant should carefully examine draft and make requests for changes as soon as possible.
- Applicants should ask about any conditions that seem incorrect or concern them.




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Terms and Conditions

- Each permit contains terms and conditions that describe the construction or operating requirements.
- Including, but not limited to: emission limitations and standards, testing, compliance determination, compliance monitoring, record keeping and reporting.




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Complying with the Permit

- The D section will list the requirements for each process or similar emission units.
- Setup procedures for monitoring, record keeping, operation and maintenance.
- Train staff on procedures and clarify roles and responsibilities.
- Be sure to keep accurate monitoring records and submit timely reports.




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Complying with the Permit

- Submit timely notifications to state and U.S. EPA for national emission standards for hazardous air pollutants (NESHAP).
- Perform required stack testing.
- Plan ahead for changes.
- Be prepared to certify compliance annually.
- Keep track of permit expiration dates.




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Permit Amendments

- You may need to amend your permit if you:
 - Need to correct typographical errors
 - Change ownership
 - Add insignificant or exempt emission units
 - Update name, number or address
 - Require more frequent monitoring




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Permit Revisions/Modifications

- You may need to revise/modify your permit if you:
 - Construct an emission unit or modify an existing emission unit or operation.
 - Request alternative emission limits, monitoring, testing, etc.
 - Need to add conditions from an Agreed Order.



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Revisions/Modifications

Pollutant	Exempt	Minor	Significant
VOC	≤ 10 T/Y	≥ 10, < 25 T/Y	≥ 25 T/Y
NO _x	≤ 10 T/Y	≥ 10, < 25 T/Y	≥ 25 T/Y
CO	≤ 25 T/Y	≥ 10, < 100 T/Y	≥ 100 T/Y
SO ₂	≤ 10 T/Y	≥ 10, < 25 T/Y	≥ 25 T/Y
PM/PM-10	≤ 5 T/Y	≥ 5, < 25 T/Y	≥ 25 T/Y
Lead	≤ 0.2 T/Y	≥ 0.2, < 1 T/Y	≥ 1 T/Y
Single HAP	< 1 T/Y	≥ 1, < 10 T/Y	≥ 10 T/Y
Total HAP	< 2.5 T/Y	≥ 2.5, < 25 T/Y	≥ 25 T/Y



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Internet Resources

- Air Permit Application Forms
www.idem.IN.gov/airquality/2495.htm
- Air Permitting Timeline & Fee Table
www.idem.IN.gov/5886.htm
- Indiana Administrative Code
www.IN.gov/legislative/iac/
- Online Permit Guide
www.idem.IN.gov/5881.htm



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For Additional Information

- Call the Compliance and Technical Assistance Program (CTAP) at (317) 232-8172 or toll free at (800) 988-7901.
- Call the OAQ Permits Branch at (317) 234-5132 or toll free at (800) 451-6027, press 0, and ask for extension 4-5132.

IDEM Water Permitting

Understanding Clean Water Management Programs

For the
2014 INDIANA SAFETY &
HEALTH CONFERENCE & EXPO
FEBRUARY 18, 2014

By:
Greg Hemker, CHMM
EHS Technology Group, LLC

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Point Source:

- any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged.

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Pollutant:

- includes, but is not necessarily limited to: dredged spoil, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, solid wastes, toxic wastes, hazardous substances, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and other industrial, municipal, and agricultural waste discharged into water.

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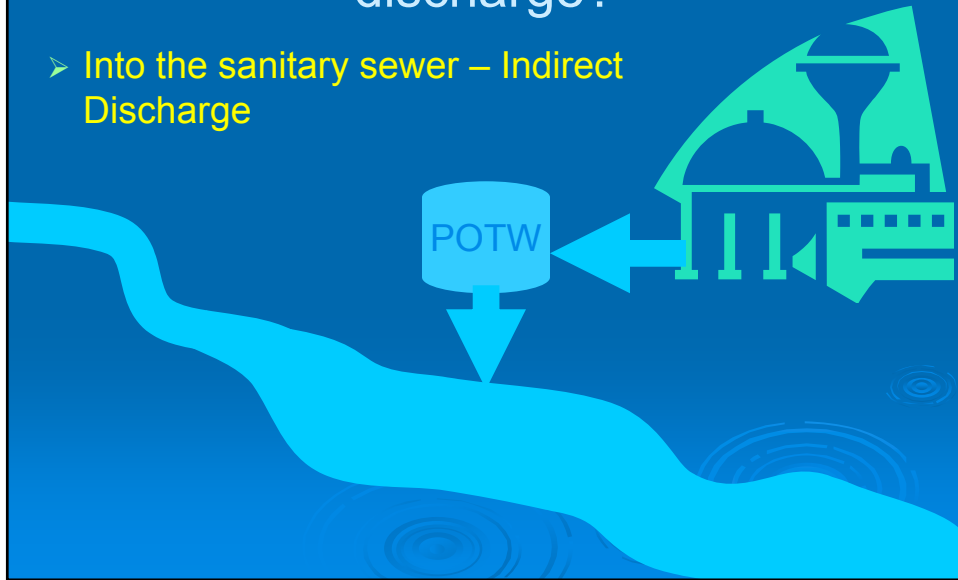
Waters of the State:

- such accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this state. The term does not include any private pond, any off-stream pond, reservoir, or facility built for reduction or control of pollution or cooling of water prior to discharge unless the discharge therefrom causes, or threatens to cause water pollution.

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How does your wastewater discharge?

- Into the sanitary sewer – Indirect Discharge



How does your wastewater discharge?

- Into the stream – Direct Discharge



Indirect Discharge

What do I have to do to comply?

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Industrial Wastewater Pretreatment Permit

In Indiana

- 47 municipalities have EPA-delegated pretreatment programs
- IDEM issues IWPP in towns and cities that do not have pretreatment programs
 - Categorical dischargers
 - Significant Industrial User
- IDEM usually processes applications in less than 60 days

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Information Required for an IWP Permit Application

- Process-related contaminants
- Highest monthly average flow
- Treatment technologies applied
- Operational and compliance history
- Production data from past 2 years
- Effluent toxicity for major discharges

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NPDES Direct Discharge Permit

Two types of permits- individual or general permits

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In Indiana

- For point source discharges into the waters of the state
- Permit form-2C for existing industrial sources
- Permit form- 2D for new industrial sources
- Permit application must include all pollutants, flow rate, discharge quantities for each pollutant

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In Indiana

- Issued permit will include:
 - defined limits for pollutant- technology or water quality based limits
 - Monitoring
 - Best Management Plans (BMP)
 - Could also include operational limits
 - Could include operator certification

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Permits by Rules

General Permits- 9 permit types

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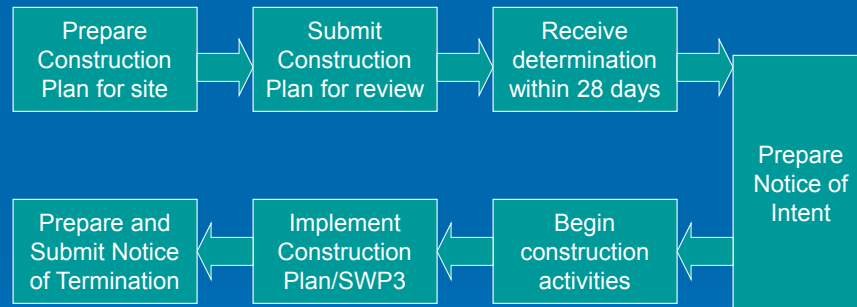
NPDES General Permits

Storm Water Permits-by-Rule

- Rule 5 – Storm water Permits Associated with Construction Activity
- Rule 6 – Storm water Permits Associated with Industrial Activity

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Rule 5 – Storm Water Permits Associated with Construction Activity



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Rule 6 – Storm Water Permits Associated with Industrial Activity

- Complete and file NOI letter – coverage and clock starts with filing - \$50
- Proof of publication required with NOI
- Annual fee - \$100
- Within 365 days
 - Complete, sign and submit Certification Checklist to IDEM
 - Establish and implement a Storm Water Pollution Prevention Plan (SWP3); notify in writing when fully implemented

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Rule 6 – Storm Water Permits Associated with Industrial Activity

- Grab sample from each outfall each year during a qualified rainfall event
 - Min. 3 months between sampling events
 - Min. 72 hours between qualified storm events
 - Total measureable precipitation ≥ 0.1 inches

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Rule 6 – Storm Water Permits Associated with Industrial Activity

- Grab sampling
- Required parameters
- First sample before implementation of SWP3
- Additional sampling must be reported
- Sample at point representative of discharge but prior to entry into any receiving body of water; if retention pond, sample at discharge

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No Exposure Certification

- All industrial materials protected from storm water exposure by storm resistant shelter
- Storm resistant shelter not required for certain situations
- Required for each facility
- Available on a facility-wide basis only, not individual outfalls

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Storm Water Pollution Prevention Plan (SWP3)

- SWP3 Team
- Site Description
- Summary of Potential Pollution
- Description of Control Measures
- Schedules and Procedures
- Documentation to support SWP3, including SWP3 considerations under the SWP3
- Certification of SWP3

Developing Your
Stormwater
Pollution
Prevention Plan
EPA 833-B-09-
002
February 2009

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Steps to Prepare SWP3

- Site Assessment and Planning
- Select appropriate Control Measures
- Procedures for Inspections and Monitoring
- Keep Records of Implementation Practices

Rule 6 Storm Water Pollution Prevention Plan (SWP3) Certification Checklist

Completed within 365 days after submission of initial, renewal or amended NOI letter
Return to Storm Water Coordinator

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SPCC Plan

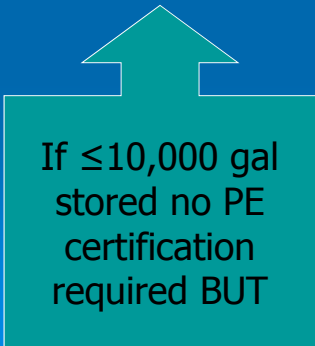
- Triggers
 - Location – reasonably reach waters of the state
 - Quantity - >55 gallons; >1,320 gallons
 - Material – oil or “oil-like”

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SPCC Plan

➤ Major Elements

- Certification by Professional Engineer
 - Initial
 - Technical amendments



If $\leq 10,000$ gal
stored no PE
certification
required BUT

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SPCC Plan

➤ Major Elements

- Review and certification by Professional Engineer
- Review at least every 5 years
- Provision for amendments
 - Discharge to navigable waters > 1,000 gallons
 - Two reportable spill events in 12 month period;
>42 gallons each event
 - Changes in facility design, construction, operation,
or maintenance that materially affects potential for
discharge

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SPCC Plan

➤ Major Elements

- Review and certification by Professional Engineer
- Review at least every 5 years
- Provision for amendments
- Security and lighting
- Physical layout
- Site inspections
- Containment and/or diversionary structures
- Direction/rate of flow; total quantities
- Unloading and loading procedures
- Spill equipment and materials available
- Training

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Regulatory Resources

➤ USEPA websites

- Storm water page-
<http://cfpub.epa.gov/npdes/stormwater/indust.cfm>
- SPCC page-
http://www.epa.gov/osweroe1/content/spcc/spcc_guidance.htm

➤ IDEM websites

- Storm Water Permitting-
<http://www.in.gov/idem/4896.htm>

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Any Questions?

Thank you for your attention.

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Hazardous Waste Identification

- Determine if the material is a solid waste.
 - Is it excluded from the definition of solid waste?
- Determine if the material a hazardous waste?
 - Is it excluded from the definition of hazardous waste?
- Has any of the material been mixed with a hazardous waste?
- Is the material being managed as Universal Waste?

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Characteristic Hazardous Waste

Ignitability

- Create fires when temperature is > 140 °F.

Corrosivity



- Acids or bases that are capable of corroding containers which may result in release of the material.
- pH < 2 or > 12.5

Reactivity

- Reactive wastes are unstable under normal conditions.
- Cause explosions, or release toxic fumes, gases, or vapors when mixed with water.

Toxicity

- Harmful or fatal when ingested or absorbed.

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Listed Hazardous Waste

- F: wastes from common manufacturing and industrial processes
- K: wastes from specific industries
- P: discarded commercial chemical products that are acutely hazardous
- U: discarded commercial chemical products that are toxic

	CESQG	SQG	LQG
HW generated in 1 month	≤ 220 lbs	220 lbs - 2200 lbs	> 2200 lbs
Storage Limits	≤ 2200 lbs	≤ 13,200 lbs	-
Storage Period	unlimited	180 days	90 days
Storage Requirements	None	Required	Required
Reports	None	Annual	Annual/Biennial
Employee Training	None	Employee knowledge	Annual Review
EPA ID number	Optional	Required	Required
Manifests	Optional	Required	Required
Emergency Procedures	None	Required	Formal Plan

	CESQG	SQG	LQG
HW generated in 1 month	≤ 220 lbs	220 lbs - 2200 lbs	> 2200 lbs
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Employee Training	None	Employee knowledge	Annual Review
EPA ID number	Optional	Required	Required
Manifests	Optional	Required	Required
Emergency Procedures	None	Required	Formal Plan

Notification

- Small and Large Quantity Generators (SQG & LQG) of hazardous waste are required to obtain a RCRA ID number from U.S. EPA.
- Generators must also submit a Notification of Regulated Waste Activity form (aka RCRA Subtitle C Site ID form) to IDEM.
- For more information go to:
www.idem/IN.gov/5029.htm

COMMON HAZARDOUS WASTE GENERATOR COMPLIANCE ISSUES

PRESENTED BY:
GREG HEMKER
EHS TECHNOLOGY GROUP

FOR:
2014 INDIANA SAFETY &
HEALTH CONFERENCE & EXPO
FEBRUARY 18, 2014



Common Compliance Issues

- **Container Labeling:**
 - Not labeled with words “Hazardous Waste”
 - Not dated at start of filling
 - Label illegible
 - Failed to use the appropriate label for shipping
 - **Best Practices:** Use indelible ink and be consistent throughout the facility

Common Compliance Issues

- **Satellite Container Management:**
 - Not labeled with words “Hazardous Waste”
 - Not closed
 - More than 55 gallons at location
 - Not at point of generation
 - Not in control of operator
 - **Best Practice:** date when full, check label regularly

Common Compliance Issues

- **Manifesting:**
 - Incorrect information (e.g. manifest #, waste description/code, quantities shipped, etc.)
 - Incomplete (e.g. land disposal restriction certification)
 - Failure to keep records
 - Failure to make “exception reports”
 - Signers not trained in DOT requirements
 - **Best Practices:** Don’t sign until thorough review



Common Compliance Issues

- **Poor Housekeeping :**
 - Spills in storage area and accumulation areas
 - Weekly inspection not performed or incomplete
 - Mismanaged empty containers
 - Unmarked containers of substances
 - Less than 50 feet distance to property line for ignitable wastes



Common Compliance Issues

- **Universal Waste Management:**
 - Improperly disposed
 - Improper packaging and labeling- needs words e.g. “Universal Waste- Lamps”
 - Use of unauthorized handlers
 - No response to releases
 - Not recycled in one year
 - **Best Practices:** Use appropriate containers, keep closed and dated



Common Compliance Issues

- **Used Oil Management:**
 - Not properly classified
 - Containers not marked with words “Used Oil”
 - Use of unauthorized handlers
 - No response to releases
 - **Best Practice:** Label “used oil” not “waste oil”



Common Violations

- **Aerosol Can Management:**
 - Not properly classified
 - Improperly disposed
 - Improper accumulation practices
 - **Best Practice:** Confirm it fits “empty container” definition before recycling can

Common Violations

- **Used Rags & Wipes Management:**
 - Not properly classified- current IDEM options laundry or waste
 - Improperly disposed- current IDEM solvent rags=hazardous waste
 - Improper accumulation practices- closed containers; no free liquids
 - **Best Practices:** Visit USEPA website for “mixture rule”, contained-in and derived from guidance
 - **Best Practice:** Recycle, Recycle, Recycle!

Public Resources

- IDEM Compliance Assistance:
- IDEM Web site:
 - www.in.gov/idem
 - Look at “Compliance”, “Hazardous waste”, & “Guidance”
- USEPA Web site:
 - www.epa.gov
 - Look at “Hazardous Waste”, “Waste Programs” & “Pollution Prevention”
 - Rags/wipes rule-
<http://www.epa.gov/wastes/hazard/wastetypes/wasteid/solvents/wipes.htm>

